



**Brix Day Fall 2013**  
**December 2<sup>nd</sup>, Brussels**

**Scientific programme**

**Introduction**

Piet Van Duppen (IKS Leuven) 10:00 – 10:10

**1<sup>st</sup> SESSION (10:10 – 12:00)**

*Chair: Pierre Descouvemont*

**New Facilities and new developments**

Pierre Bricault (SCK•CEN) 10:10 – 10:25  
*ISOL@MYRRHA - target station design*

Donald Hounbo (SCK•CEN) 10:25 – 10:40  
*LIEBE target - efficiency analysis*

Wolfgang Plaß (GSI) 10:40 – 10:55  
*Cryogenic Stopping Cell and Multiple-Reflection Time-of-Flight Mass Spectrometer  
For recision Experiments with Exotic Nuclei at GSI and FAIR*

Francesca Renzi (IKS Leuven) 10:55 – 11:10  
*ACTAR TPC: an active target of next generation*

**Nuclear structure, deformations and shape coexistence**

Piet Van Isacker (GANIL) 11:10 – 11:25  
*Aligned neutron-proton pairs in  $N=Z$  nuclei*

Wouter Ryssens (ULB) 11:25 – 11:40  
*Mean-field description of rotating ellipsoids in the rare earth region*

Kosuke Nomura (GANIL) 11:40 – 11:55  
*Microscopic IBM description of shape coexistence*

**LUNCH BREAK (& Steering Committee Meeting) (12:00 – 14:00)**

## 2<sup>nd</sup> SESSION (14:00 – 16:15)

Chair: Michel Godefroid

### Laser Spectroscopy

Thomas Carette (ULB)	14:00 – 14:15
<i>Electronic parameters for isotope shifts of the 4s - 4p transition in Cu I</i>	
Jasna Papuga (IKS Leuven)	14:15 – 14:30
<i>Laser spectroscopy of K isotopes</i>	
Ivan Budincevic (IKS Leuven)	14:30 – 14:45
<i>Neutron rich <sup>218m,219,229,231</sup>Fr final conclusions</i>	
Evgeny Mogilevskiy (IKS Leuven)	14:45 – 15:00
<i>Design of the gas cell for IGLIS experiments</i>	
Camilo Granados Buitrago (IKS Leuven)	15:00 – 15:15
<i><sup>227</sup>Ac Hyperfine structure</i>	
Simon Sels (IKS Leuven)	15:15 – 15:30
<i>βDF and α-decay spectroscopy of <sup>194,196</sup>At</i>	

### Physics Beyond the standard model

Gergely Soti (IKS Leuven)	15:30 – 15:45
<i>Precision beta-spectroscopy in search for physics beyond the Standard Model</i>	
Rohan Glover (University of Liege)	15:45 – 16:00
<i>Progress towards an argon magneto-optical trap for weak interaction studies at Ulg</i>	
Paul Finlay (IKS Leuven)	16:00 – 16:15
<i>Status of the <sup>35</sup>Ar beta-neutrino correlation measurement with WITCH</i>	

## COFFEE BREAK (16:15 – 16:45)

### **3<sup>rd</sup> SESSION (16:45 – 18:00)**

*Chair: Thierry Bastin*

#### **Reaction mechanisms**

Edna Pinilla (ULB) 16:45 – 17:00  
*Microscopic eikonal elastic scattering*

Janina Grineviciute (ULB) 17:00 – 17:15  
*Elastic scattering of  $^{17}\text{F}$  in microscopic CDCC*

Maarten Vanhalst (University of Gent) 17:15 – 17:30  
*Two-body momentum distributions in two-body cluster approximation*

#### **Nuclear Astrophysics**

Alessandro Pastore (IAA Bruxelles) 17:30 – 17:45  
*Nuclear models for nuclear astrophysics*

Anthea Fantina (ULB) 17:45 – 18:00  
*Stellar electron-capture rates on nuclei within a self-consistent microscopic approach*

### **CONCLUSIVE REMARKS (18:00 – 18:20)**